

PugetSoundPartnership

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Puget Sound Partnership Science Panel Meeting Summary

April 13 & 14, 2010
NOAA NW Fisheries Science Center, Seattle

Day 1

Science Panel Members Present:

- Joel Baker
- Joseph Gaydos
- Robert Johnston
- William Labiosa
- Thomas Leschine
- Jan Newton
- Timothy Quinn
- Usha Varanasi
- Katharine Wellman

*It is intended that this summary be used along with notebook materials provided for the meeting.
A recording of this meeting is retained by the Partnership as part of the formal record.*

Action Items:

- Approve February 2010 Meeting Summary

Meeting Summary:

- Agency Updates
 - Legislation – 2010 outcomes and 2011 planning
 - Budget – 2010 outcomes and 2011 planning
 - Puget Sound Institute
 - Puget Sound Science Update
 - Science Center Update on Integrated Ecosystem Assessment
 - Strategic Science Plan
 - Ecosystem Coordination Board (ECB) Shoreline Work Group on Shoreline Protection
 - Work Session
 - Performance Management
 - Monitoring
 - Work Plan
 - Budget Planning
-

CALL REGULAR MEETING TO ORDER

Science Panel Chair Timothy Quinn opened the regular meeting of the Science Panel at 10:10 a.m. The agenda for the day was reviewed and approved as proposed.

Approval of the February 2010 Science Panel Meeting Summary

Bob Johnston provided last minute changes to the meeting summary. Panel members had not had time to review the recommended changes and approval of this summary was put on hold.

AGENCY UPDATE (See meeting materials for details.)

David Dicks was unable to attend the first day of the meeting but will attend on day two. He will provide his report at that time.

Gerry O'Keefe, the Partnership's new Deputy Director, introduced himself and provided his background and initial thoughts on the agency structure going forward.

He is working on the organizational chart and will provide to the Panel as soon as the management team approves it. He is also working on job descriptions, hiring of the Science Program Director, and a number of other issues to get the agency well positioned for 2011. He noted that the staff is too small to do it all and the agency will need the Panel and other boards to help with priorities and building on the efforts. His main job is to help discipline the agency. Lynda Ransley is now the Director of Special Projects and Outreach.

Gerry has not yet discussed with David Dicks regarding the management team contact for the Science Panel; it may be him, the Science Program Director, once on board, or both. For the Science Program Director, there are a couple candidates. He is working on the negotiations to get this position on staff. He would like to have this wrapped up in the next week to 10 days. If he comes back to this meeting in two months and a Science Program Director is not hired then something is wrong.

LEGISLATION (See meeting materials for details.)

Michael Grayum updated the Panel on the 2010 legislative outcomes. The session adjourned at 1:00 a.m. today and, concerning the interests of Puget Sound, this was a good session. Several bills were successfully passed and a coordinated effort used.

Bills of note:

- *Copper Brake Pads* – This was a collaborative effort and will establish a national model and pave the way for federal legislation
- *Marine Spatial Planning* – President Obama has funded ocean policy including marine spatial planning. Other states are also getting in place to implement this tool along with Washington. The others haven't put legislation in place yet so Washington is in good shape to implement this program once funding is identified
- *Critical Areas Ordinances* – allows for the incorporation of a "no net loss" policy into statute and will be a powerful tool for planning

Michael's goal for today's meeting was to begin discussion of the 2011 legislative session. He explained that the Leadership Council approved a legislative process at its last meeting; this

process is included in the meeting materials. He noted that this is the ideal process and actually should have started in November/December 2009. He hopes to use the approved process for the 2012 session. For the 2011 session he will need to truncate the process to fit the schedule.

The timeframe for this year includes submittal of the legislative package to the Governor's office in mid-September. We would expect to hear which proposals the Governor would like to move forward by mid-October.

He reviewed the various board roles in the summary document. The Panel then asked clarifying questions on the Panel's role, how the bills are scientifically vetted, and process for next session.

Michael hopes to have a coordinated effort for 2012 session and will start to work on it this November/December. He has looked at the Action Agenda and listed the possible legislation and will start efforts from that list.

Gerry O'Keefe, Panel members, and Michael Grayum discussed the need for deadlines, clear roles for science and policy, and how the cross-partnership workgroups should be used for the science-policy crossover.

The Panel is happy to inform the policy debate and get to the "how to implement" as soon as possible. They asked Michael to bring them clear succinct science questions, not open-ended, and to ensure that the social science questions are also addressed in the legislative discussions.

PUBLIC COMMENT PERIOD

Fred Felleman, Northwest consultant for Friends of the Earth, discussed the indicators list and need to include forage fish. The current list of ecosystem indicators has eelgrass, not herring. He suggested the need to have herring and to revisit this issue before approval of the final list.

BUDGET (See meeting materials for details.)

Jim Cahill provided the budget update and reviewed the outcome of the 2010 legislative session.

Joel asked about the list of projects that were funded with the capital budget – are these now Partnership projects and is the Science Panel responsible to track data?

Jim reported that these projects would be included in the tracking system that Mary Beth Brown is working on.

The Panel then discussed the need to include adaptive management when funding projects. We should be learning from these projects. This is a huge investment by the people of Washington and we should be able to tell them what the projects are doing.

Gerry asked what a 'scientifically-based" process would look like. How do we shape the process with the Legislature?

The Science Panel is not sure they want to engage in the process – they want to make sure the projects are completed and being monitored for outcomes. If monitoring is not included and data gathered, the Science Panel would not be able to report on what was accomplished by funding the projects.

The Panel, along with Gerry and Jim, discussed the need to make sure projects are linked to the Action Agenda and questions the Panel would like to have answered about the projects identified. It was suggested that the projects all be funneled through a granting organization with a tracking system already in place.

Action – invite a panel of granting organizations to a future meeting to discuss how they track and monitor the projects they fund.

2011-2013 budget development

Jim discussed the Estimated Cost of the Action Agenda Report that the Partnership is to submit to the Legislature and the difficulty in identifying the Puget Sound funding needs over the next biennium since agencies do not have budget information identified by regional needs. He reported that he is also working on the agency's budget request and needs to provide both to the Leadership Council for approval at its July meeting.

He noted that the Biennial Science Work Plan (BSWP) would be used in the budget estimates. He can use the existing version of the BSWP if the Panel decides to not update the current plan but he will need to know what the Panel plans to do shortly. The Draft Estimated Cost of Action Agenda Report is due July 1; although the current plan is to provide to agencies for comment by July 1, take to Leadership Council for approval of the final draft at the July meeting, and submit to the Office of Financial Management by mid-August.

The Panel discussed some options for science funding. They will revisit the BSWP to see what needs to be funded; they also want to revisit the BSWP to make sure, now that we know now what we didn't know then, and see what needs to be revised. The Panel needs to provide Jim with a product by July 1 (at least concepts, the details are not needed yet).

Action: Scott Redman, Joel Baker, John Stark, and Tim Quinn will review the cost estimates in the BSWP and identify possible revisions for discussion at the June Science Panel meeting.

Jan Newton noted that several of the comments received on the Strategic Science Plan are best fitted into the BSWP. The Panel may be able to revise the BSWP using some of the comments along with the funding gap analysis.

FFY2010 Funding

There is no update on the 2010 funding yet. This is an awkward process, EPA is required to consult with the Partnership for some of our work but, due to competition laws, they need to be careful with how to accomplish that consulting process. There is a meeting next week with EPA to discuss further.

PUGET SOUND INSTITUTE (See meeting materials for details.)

Joel Baker provided an overview of the Puget Sound Institute, his role as Director, and the proposed role and connection for the Science Panel.

Funding for the Institute will go through the College of the Environment and support the implementation of the Action Agenda through investigation studies not monitoring. During the first five years, the Institute's priority will be Partnership-related work.

Joel sees the Institute providing three things to the Partnership:

1. *Core support* – proposing a number of visiting scientists, post docs, or mid-career scientists working on projects to assist with Action Agenda work. This would also include social scientists and economists
2. *Study Panels* – about half the money would go into detailed analysis and synthesis of Puget Sound Partnership-relevant topics. The topics would be identified by Partnership leadership, panels would be competitively chosen, and results peer reviewed
3. *Communication*
 - Web-based encyclopedia of Puget Sound
 - Support for wiki-Puget Sound Science Update
 - Public seminars/workshops/etc.

Joel reviewed the processes and structures being proposed for the Institute's work. The final roles for the Science Program Director, Science Panel need to be very clear. Joel still needs to connect with the Washington State Academy of Sciences to see how they would like to be connected. Joel noted that he got involved in this when it was obvious that the Partnership was understaffed and this was a way to supplement the work of the Partnership.

Gerry O'Keefe noted that the Partnership does not have any interest in housing the scientists to do the science work. We do need to figure out how the coordination and priority setting works and how to reach consensus and work together on funding, so we don't trip over each other in the legislature or congress.

Possible roles for the Science Panel include:

- Selection of study topics
- Peer review of products
- Technical Board to help guide projects

Joel then presented three possible 2010-11 PSI Study Panels that have come out of his discussions:

1. Projecting Puget Sound Water Quality in 2020 and beyond: Understanding the consequences of increasing nutrient and pathogen loadings in an era of landscape and climate change
2. Understanding the scientific, social, economic and political barriers to effective shoreline management in Puget Sound
3. Envisioning the future of Puget Sound

The studies will include a white paper executive summary along with a peer-reviewed publication and would cost less than \$500K each.

These aren't the only projects that will come forward, but he would like to get one or two started soon. He is asking for Science Panel response on these choices. This does not need to be decided today, but soon. The group discussed the proposals and how some projects being worked on currently and other projects were thought to be complete already. It was suggested to have the various groups working on the projects get together to identify status and gaps needing to be filled through additional study.

Michael cautioned the timing of the projects so that legislation isn't affected due to a study being done. Joel appreciates Michael's comments and will take that into consideration.

Action – this is the start of a longer conversation – include a half hour discussion to tomorrow's agenda for the Panel to provide as much feedback as possible.

Tim questioned whether the projects should be presented to the ECB. Joel reported he was planning to ask ECB for its input on the proposed studies.

PUGET SOUND SCIENCE UPDATE (See meeting materials for details.)

Mary Ruckelshaus reviewed the process to complete the sections and role of the Science Panel.

Jan and Tim reflected on how the process worked during their Section 2A process. Jan commended Mary on the work she has done to move this forward. She and Tim reviewed both the section and all the comments received by the peer reviewers. She suggested the need to have a way to provide the comments and make sure not to give conflicting responses.

Tim encouraged the Science Panel members to read all the sections and comments received and get any responses back to Mary as soon as possible.

The timing for posting of the information was discussed:

- Sections 3 and 4 will be done in May, with posting in June
- Synthesis of key findings will be written over the summer and published in a peer-reviewed journal
- Summary for Policy Makers questions will be developed using a workshop including Science Panel, Leadership Council, staff and others. The Science Panel will be writing this document

The group discussed the web page, how to present the information, and possibility of the Puget Sound Institute including its findings on this site also as a way to coordinate and link efforts. There was concern voiced about using a "wiki" format for commenting, updates, and posting of new information. Mary noted that although we have been calling it a "wiki" it really isn't. The only things that will be posted will be information that has gone through the gatekeeper (Tish Conway-Cranos). We will need to develop a process to make decisions on what to post. It is going to take money to keep this page current and updated.

By December the Summary for Policy Makers is due to be completed, and the Synthesis should be completed at the same time.

Staff hopes to use this work in the monitoring efforts of the agency.

SCIENCE CENTER UPDATE ON INTEGRATED ECOSYSTEM ASSESSMENT (IEA) (See meeting materials for details.)

Mary Ruckelshaus and Phil Levin presented this information explaining that IEA is a framework and process that NOAA uses and the Puget Sound is one of their demonstration areas. Steps include:

- Scoping
- Indicators, targets
- Status, risk
- Evaluate strategies
- Implement actions
- Monitoring
- Evaluate, adapt

Mary showed how these steps link into the Partnership's policy/planning process, open-standards, and Puget Sound Science Update – this information then becomes the overall IEA.

Phil explained the targets and will be starting on the risk assessment in the summer. He talked about a process used in Australia where they have the risk of something bad happening on one access, with the amount of recovery time on the other access.

Phil discussed the reasons to use ecosystem modeling and the two different models being used in Puget Sound, and differences between the two models.

Mary provided an overview of the Phase 1 pilot study goals from the IEA and reported they are now looking at Phase 2 (NWFSC, UW Climate impacts group, King Co DNR). She noted that there are at least three future land use programs that could be used for this modeling and they are now in discussions on which one to use.

Mary explained how the policy and science sides would need to work to crosswalk the studies to put into the policy work and get the story out. She talked about a salmon project that she did in the Samish and how they worked with the watersheds throughout the process; due to the findings, the watershed revised its salmon recovery plan.

Tim sees the ECB as critical to identifying the issues that are important for the Science Panel to inform on.

This work was commissioned by EPA to help the Partnership. We need to figure out how to communicate this work and the outcomes.

Next steps for IEA Work include:

- Identify gaps in work commissioned to date

- Need for social indicators
- Identify dashboard indicators – only 12 and not redundant
- Identify assessment indicators – would have a lot of indicators and could be redundant
- Complete the section one update on drivers and pressures indicators

5:15 p.m. RECESS FOR THE EVENING

Puget Sound Partnership Science Panel
Meeting Summary

April 13 & 14, 2010
NOAA NW Fisheries Science Center, Seattle

Day 2

Science Panel Members Present:

- Joel Baker
- Joseph Gaydos
- Robert Johnston
- William Labiosa
- Thomas Leschine
- Jan Newton
- Timothy Quinn
- John Stark
- Usha Varanasi
- Katharine Wellman

MEETING RECONVENED

Science Panel Chair, Timothy Quinn reconvened the meeting at 8:35 a.m. and reviewed the first day of the meeting:

Legislation – No action for Science Panel, other than adding time in meeting planning for legislative discussions. This is an opportunity for the Panel to think about possible legislative agenda items to work through the Leadership Council.

Budget – Jim Cahill has asked for information from the Science Panel by June 1 concerning the BSWP – need small work group (Joel, John, and Tim) to work on recrafting of BSWP – Bob discussed a memo that went out through the State of the Sound that has identified where more work was needed which may be a good starting point. Joel agreed with looking at the BSWP and if there are additional needs. This should also help the state agencies – BSWP is section E3 of the AA. There was a cross-partnership workgroup on budget but does not believe that the committee has met. David provided his thoughts on moving on the budget and the process that is used in state budgeting. It would be good to have information in soon, but even if not done by June 1 there is time in the process, and July 1 would still be a good date to shoot for. He still has hopes for passage of the federal funding bill, which would give the Puget Sound some certainty. He suggested having the budget cross-partnership workgroup meet and map out the path forward. Bob suggested including both the federal and state funding planning.

Project Selection - one question yesterday was on capital projects: how they are selected and if there is a role for the Science Panel. David thinks this would be enormously helpful. He discussed the EPA RFP process and other grant processes and the need for the Partnership to have an open transparent process to use.

Feedback to Joel on the PSI – looking to have another half hour or so on the agenda today – if there is not time, Joel would appreciate any additional thoughts via e-mail, he felt he

received good advice during yesterday's discussion and will revise the proposal and get back out to the Panel.

Puget Sound Science Update - All Panel members are tasked to review parts of the PSSU – it is a quick turnaround – Panel members need to read all the chapters.

STRATEGIC SCIENCE PLAN (See meeting materials for details.)

Jan Newton provided an overview of the status of the Strategic Science Plan and reviewed the comments received on this document during the comment period. She reported that, although the Panel hoped to approve the final version at this meeting, some of the comments could be incorporated into the Plan using a subcommittee of Panel members and then approve for finalization during the June meeting. There are some comments that we will not be able to address in the Strategic Science Plan but could be used when revising other Science Panel documents.

Panel Discussion:

- The Panel agreed with using a subcommittee to make high level edits to the Plan using the comments received and waiting until the June meeting for final approval
- Discussed the IEA and how this is a management tool and that the IEA in the Plan is a wider concept from the IEA Mary presented during yesterday's discussion
- The Strategic Science Plan is a Science Panel document and the agency would still need to have its own management plan such as, the funding of capitol projects
- The Strategic Science Plan should be strategic, whereas the Biennial Science Work Plan (BSWP) is where the actions will be identified
- The Plan needs to be a little more explicit on the outreach and education piece, this is where the Panel would like to train the next generation of scientists. We need to be clear on this and connect with the larger outreach and education plan of the Partnership
- This a living document and will be updated, although there is no set schedule for revisions
- Need the glossary on items and their definitions so we are consistent
- The challenge will be thinking about the org chart for the science community at the ecosystem scale. This does not need to be included in this document but the Science Panel could perhaps have this discussion. Joel took on this new task. David Dicks believes this would be very helpful to the agency and would be useful for him to use during his discussion with the Legislature and Congress

Action:

- Jan and Scott, along with volunteers (Bill, Tom, Joe, and Trina), will make minor revisions, add a glossary, but not go into detail; the detail would be added in the BSWP
- June Science Panel meeting final Panel approval
- Take to Leadership Council for adoption at June's meeting
- Send acknowledgement to those who commented giving feedback on how the comments will be used
- Joel take the lead on drafting an ecosystem-wide Science Community Org chart

ECB SHORELINE WORK GROUP (See meeting materials for details.)

Joe Ryan provided this presentation; this included an interesting history of the Shoreline Management Act (SMA) and “no net loss” rules. He reported that although “no net loss” is a law, it is still not defined. The Action Agenda calls for habitat protection and restoration; we are doing a good job on restoration, but not as good with the protection. We now have a chance to codify “no net loss” under the new guidelines – in the meantime, we continue to lose 2 miles of shoreline function per year. He reported that the Ecosystem Coordination Board (ECB), although they did not feel the timing was ripe for shoreline legislation in 2010, decided to start a shoreline workgroup in January. Tim Quinn has been attending these workgroup meetings and has volunteered the Science Panel’s assistance with the science questions. At this meeting, Joe has requested the Science Panel’s help with some science questions to lead to an ECB and Leadership Council consensus on how to move forward with this effort. The ECB Shoreline workgroup would like to take recommendations to the next ECB meeting in early May.

The group discussed the shoreline work, science questions needing to be answered, and groups that should be included.

Since the SMA already requires “no net loss of ecological function”, the Panel, and/or the Puget Sound Institute, could help define what “no net loss” means along with what the work done by the Puget Sound Nearshore Estuary Restoration Program (PSNERP) is, since this is a science question. There is a time sensitivity to answer this question with the SMP updates already a third complete and Kitsap County starting its revisions this week.

David Dicks suggested a scenario where the Science Panel, Nearshore Science Team, Puget Sound Institute, and other scientists could come up with the science side of the issue explaining the future scenario – policy makers could then sell the changes needed:

- What does it mean when we lose 2 miles
- What does no net loss mean

The group discussed the toxics loading legislation and the reason that it did not go through was due to the science questions; oil companies were aware of that and it put a hold on passage of the legislation. If we could come to a 90% certainty on the facts on shoreline then that would be enormously powerful – it would not guarantee legislation would pass, but it would be a winning formula in the marriage of the science and policy. It would be influential to have the Science Panel, ECB, and Leadership Council come forward on an issue.

The Panel members discussed how most of the work concerning “no net loss” to date has been done in wetlands and it is unfortunate that we are still losing wetlands. Some say the reason that we are still losing wetlands is because the definition is not clear – it would be helpful to look at the definition of “no net loss” of shorelines and make sure we ask the right questions.

Joe is asking the Science Panel for a quick process bringing together the groups to give guidance on “no net loss.”

Joel Baker summarized what he believes to be needed:

- Short term have PSNERP come in with the role of the shoreline
- Second have PSNERP say what the trend is (losing 2 miles)

- Third would be the crystal clear definition of what “no net loss” is
- And finally, tee up what issues are raised by trying to manage a system to “no net loss” including the social science aspect

He believes the PSI could assist with this work.

Action: Joe Ryan will convene a group consisting of Tim, Joel, a representative from Ecology’s shoreline program, a few PSNERP members, and several members of the ECB Shoreline workgroup, to figure out where there are opportunities where we could all agree we could move something forward together.

PUBLIC COMMENT PERIOD

Fred Felleman, consultant, suggested the need to prepare a cost benefit analysis on shoreline issues. He believes one failure in the stormwater discussion was not having the discussion on cost. He would be armed with this information for shoreline legislation.

Tom Mumford, Department of Natural Resources, noted his comments do not reflect the sentiments from either group. He believes “no net loss” will help, but not restore Puget Sound. He noted that it would be interesting to know how many bulkheads are going in and what conditions are put on the permits. “No net loss” is like a big puzzle where you move the pieces from one place to another; you still have the same number of pieces but have lost the picture. The public needs to have trust in what is being said and the Partnership has to generate that trust and be transparent.

WORK SESSION (See meeting materials for details.)

The Panel spent the afternoon in a work session focused on the performance management needs for the Partnership. Performance Management Manager, John Becker facilitated this session. (The work session was not recorded.)

Martha Neuman provided an overview of the work session:

- Action Agenda decision-making context in Performance Management
- Need to continue to focus on, and understand, science/policy interface
- Provide input to the newly developed monitoring program
- Learn about the executive dashboard indicators development process
- Clarify Science Panel role in future target setting

Action Agenda Decision Making Context for Performance Management

- Need to map out when to update the Strategic Science Plan and the Biennial Science Work Plan (BSWP)
- July 1 Dash-board indicators approved
- Targets and benchmarks to Leadership Council for approval in September and November
- Working on results chains during the summer

She explained that performance management is a way to systematically improve an organization and its processes using quantitative and qualitative analysis. She noted that the discussion will be focused on qualitative indicators today and realizes this is not a science

decision but a policy decision to be informed by science. (See handout on background on indicators.)

John Becker believes we can get the indicators in place by July 1 and they will be the best indicators in the nation. He then explained the process he is using to get the indicators ready for Leadership Council approval in July.

Dashboard of Ecosystem Indicators

- He is working with a select group of “in the know” scientists to develop an executive list of dashboard of indicators
- Reminded the group of the importance to focus on the success of our interface between science, policy, monitoring, performance management, and communications
- Answers the question “what is the Puget Sound about”
- Developing 12-20 high level dashboard indicators
- Aimed at telling the Sound’s story and persuading people to behave differently (improve their behavior accordingly)
- Will be done by July 1

Monitoring

Nathalie provided an overview of the proposed coordinated and integrated ecosystem monitoring and assessment program for Puget Sound and structure. She reminded the Panel that its role is to guide the monitoring program.

Program for coordinated and integrated ecosystem monitoring and assessment in Puget Sound:

- Informs
- Supports and facilitates coordination
- Aligns
- Evaluates
- Improves
- Manages and provides access to data

Panel comments included:

- Would not use the word assessment – would use evaluation or another word
- Does not want to add a new monitoring program, but would like a program that coordinates the existing efforts
- Needs to be value added to get people to come to the table

Steering committee proposed roles

- Advises a program that is responsive to the regions needs in the context of Puget Sound health protection and recovery
- Provides high-level advice about how to develop, support, and maintain the program
- Engages decision-makers on statewide and regional data collections and management approaches

Nathalie explained how she is moving forward on proposing steering committee members – she is doing her research, will put her plan on paper, and then will make her recommendations to Gerry and David Dicks for approval. She would like to have the first Steering Committee meeting the last half of May

The Panel discussed how monitoring is always the first thing offered up when cuts are made and that would need to change; funding is a key thing for this group, as well as identifying how to make this group different and relevant to be successful.

Recommendations for Science Panel engagement:

- **Provide advice on the operational framework** for the Monitoring program –the framework will be presented at the June meeting
- Science Panel to **endorse criteria** that the Monitoring program will use as a basis for prioritizing the greatest needs for targeted research, effectiveness studies, and status and trends monitoring. Will ask for endorsement of the criteria at the June or August meeting

Tim noted that he thinks the process that John is going through will inform status and trends monitoring. He sees Nathalie's work feeding into the indicators – two levels of indicators – one tells the story, and the other would be logistically feasible to monitor. Nathalie reported she is in the discussions for indicators so this linkage is being made.

The Partnership will be able to influence monitoring around Sound through the state budget process, grant funding, and the performance management system once in place.

Nathalie reported that she will come back to the Science Panel with other requests in the future.

Performance Management – criteria for selecting targets to work on in 2010

Martha Neuman presented this agenda item reviewing the criteria being used to select the initial targets including:

- Must be measurable with data that is currently available
- Existing EPA targets will be reset so they must be included
- Need to include at least one human health and/or well-being target if possible
- Ecosystem indicator targets:
 - o A reporting indicator that is “highly” likely not to be selected
- Soundwide threat reduction targets:
 - o Ranked very high or high in 2009 Threats Technical Memos
 - o Is currently lower ranked, but needs continued investments to stay managed
 - o Is an existing reporting target required under the NEP and needs updated numeric targets
 - o Region has a reasonable chance of setting a sound-wide target in 2010
 - o Resolution of issues about the existing definition or ranking would not elevate the threat

Martha noted that targets will get set on some of the dashboard indicators but not all and that target setting is a political process that is negotiated with those who have control. She noted targets are where we want to be, not what we have to have. The first question to ask is: how much do we need? This depends on what services you are wanting – human targets. We also need to consider long-term implications and scenarios such as climate change when setting targets. The group then discussed the technical steps needed to set the targets and adaptive management process.

Science contribution:

- Help resolve conceptual model disconnects in Puget Sound (some threats are also benefits)
- Help/Lead technical analysis
 - o Develop ranges and options of what can be considered
 - o Identify strengths/weaknesses, certainties/uncertainties

Science Panel role:

- Participate on the joint cross-partnership work groups
- Review or commission review of technical steps for targets and results chains

John Becker reported that he learned today the need to lay out a clear process for developing the targets and making decisions, and that we want to set targets for as few things as possible.

Trina suggested having the 'threats' cross-partnership workgroup help with target setting.

John thanked the Panel for their work.

The Panel did not have time to discuss the work plan or budget at this meeting.

2:30 p.m. ADJOURN

Summary **APPROVED** by Timothy Quinn, 2010 Science Panel Chair